

SUPPLEMENTAL MATERIAL

Table S1. Characteristics of the type 1 myocardial infarction population.

	Type 1 myocardial infarction (n=274)	
	Men	Women
No. of participants, n (%)	184 (15.5)	90 (11.9)
Age (years), mean (SD)	66.1 (13.1)	72.1 (12.8)
<i>Past medical history</i>		
Smoking, n (%)	127 (69)	47 (52.2)
Diabetes mellitus, n (%)	39 (21.2)	18 (20.0)
Hypertension, n (%)	92 (50.0)	44 (48.9)
Hyperlipidaemia, n (%)	81 (44.0)	37 (41.1)
Family history, n (%)	85 (46.2)	47 (52.2)
Angina, n (%)	68 (37.0)	32 (35.6)
Myocardial infarction, n (%)	53 (28.8)	24 (26.7)
Previous PCI, n (%)	41 (22.3)	14 (15.6)
Ischemic heart disease, n (%)	82 (44.6)	42 (46.7)
Previous CABG, n (%)	22 (12.0)	1 (1.1)
Heart failure, n (%)	6 (3.3)	2 (2.2)
Cerebrovascular disease, n (%)	14 (7.6)	5 (5.6)
Peripheral Vascular Disease, n (%)	5 (2.7)	3 (3.3)
<i>Medications at presentation</i>		
Aspirin, n (%)	76 (41.3)	30 (33.3)
Clopidogrel, n (%)	25 (13.6)	11 (12.2)
Prasugrel, n (%)	2 (1.1)	0 (0.0)
Ticagrelor, n (%)	1 (0.5)	0 (0.0)
Warfarin, n (%)	11 (6.0)	3 (3.3)
Betablocker, n (%)	56 (30.4)	24 (26.7)
ACE inhibitor or ARB, n (%)	58 (31.5)	32 (35.6)
Ca-channel blocker, n (%)	27 (14.7)	17 (18.9)
Nitrate, n (%)	49 (26.6)	16 (17.8)
Nicorandil, n (%)	9 (4.9)	0 (0.0)
Diuretic, n (%)	31 (16.8)	20 (22.2)
PPI, n (%)	58 (31.5)	41 (45.6)
Statin, n (%)	85 (46.2)	37 (41.1)
NOAC, n (%)	0 (0.0)	1 (1.1)
<i>Electrocardiogram</i>		
Myocardial ischaemia	61 (33.2)	20 (22.2)
ST-segment elevation	11 (6.0)	2 (2.2)
ST-segment depression	34 (18.5)	8 (8.9)
Left bundle branch block	10 (5.4)	6 (6.7)
T-wave inversion	57 (31.0)	26 (28.9)
<i>Physiological parameters</i>		
Heart rate (bpm), mean (SD)	72 (20)	77 (18)

Systolic BP (mmHg), mean (SD)	137 (29)	141 (26)
<i>High-sensitivity cTnI concentration</i>		
At presentation, ng/L [median, IQR]	94 [3-421]	48 [18-273]
At peak, ng/L [median, IQR]	705 [148-3012]	164 [38-1178]

Presented as mean (SD), median (inter-quartile range), or number (%). Abbreviations: ACE = angiotensin converting enzyme; ARB = angiotensin receptor blockers; CABG = coronary artery bypass grafting; PCI = percutaneous coronary intervention; PPI = Proton Pump Inhibitor; NOAC = novel oral anti-coagulants; BP = blood pressure.

Table S2. Presenting symptom characteristics stratified by diagnosis.

	Suspected acute coronary syndrome		Type 1 myocardial infarction	
	Men (n=1,185)	Women (n=756)	Men (n=184)	Women (n=90)
<i>Presenting symptom*</i>				
Chest pain, n (%)	1081 (91.2)	698 (92.3)	171 (92.9)	84 (93.3)
Dyspnoea, n (%)	331 (27.9)	216 (28.6)	58 (31.5)	35 (38.9)
Palpitation, n (%)	86 (7.3)	81 (10.7)	3 (1.6)	8 (8.9)
Syncope, n (%)	22 (1.9)	8 (1.1)	1 (0.5)	1 (1.1)
Other, n (%)	123 (10.4)	65 (8.6)	15 (8.2)	6 (6.7)
<i>Radiation</i>				
Left arm, n (%)	368 (31.1)	271 (35.8)	89 (48.4)	44 (48.9)
Right arm, n (%)	138 (11.6)	87 (11.5)	50 (27.2)	21 (23.3)
Neck/jaw, n (%)	234 (19.7)	212 (28.0)	41 (22.3)	29 (32.2)
Back, n (%)	196 (16.5)	237 (31.3)	29 (15.8)	25 (27.8)
Other, n (%)	81 (6.8)	55 (7.3)	9 (4.9)	8 (8.9)
<i>Additional symptoms</i>				
Nausea, n (%)	262 (22.1)	257 (34.0)	35 (19.0)	30 (33.3)
Vomiting, n (%)	41 (3.5)	34 (4.5)	6 (3.3)	3 (3.3)
Sweating, n (%)	371 (31.3)	229 (30.3)	58 (31.5)	29 (32.2)
Shortness of breath, n (%)	225 (19.0)	126 (16.7)	28 (15.2)	21 (23.3)
Palpitations, n (%)	38 (3.2)	29 (3.8)	3 (1.6)	4 (4.4)
Other, n (%)	54 (4.6)	35 (4.6)	7 (3.8)	1 (1.1)
<i>Symptom feature</i>				
Typical nature [†] , n (%)	772 (65.1)	532 (70.4)	117 (63.6)	73 (81.1)
Typical location [‡] , n (%)	1068 (90.1)	683 (90.3)	165 (89.7)	84 (93.3)
Radiation (any), n (%)	586 (49.5)	491 (64.9)	119 (64.7)	65 (72.2)
Additional symptoms, n (%)	657 (55.4)	456 (60.3)	94 (51.1)	56 (62.2)
<i>Symptom classification</i>				
Typical pain [§]	719 (61)	489 (65)	109 (59)	69 (77)
Atypical pain	466 (39)	267 (35)	75 (41)	21 (23)

* Patient reporting more than one symptom were counted for all symptoms reported

[†] Typical nature is pain with descriptors of dull, heavy, tight, pressure, ache, squeezing, crushing or gripping

[‡] Typical location is chest, arm or jaw

[§] Typical pain classified in any patient who described pain of chest, arm or jaw, with descriptors of dull, heavy, tight, pressure, ache, squeezing, crushing or gripping.

^{||} Atypical pain classified in any patient who described epigastric or back pain, or pain that was burning, stabbing, indigestion like, or any other pain description, or presentation.

Table S3. Comparison of symptom features in all men and women with a diagnosis of type 1 and type 2 myocardial infarction stratified by sex.

	Type 1 myocardial infarction			Type 2 myocardial infarction			p-value (All Type 1 vs Type 2)
	All patients (n=274)	Men (n=184)	Women (n=90)	All patients (n=77)	Men (n=38)	Women (n=39)	
<i>Presenting symptom*</i>							
Chest pain, n (%)	255 (93)	171 (93)	84 (93)	65 (84)	33 (87)	32 (82)	0.03
Dyspnoea, n (%)	93 (34)	58 (32)	35 (39)	30 (39)	16 (45)	14 (36)	0.50
Palpitation, n (%)	11 (4)	3 (2)	8 (9)	15 (19)	6 (16)	9 (23)	<0.001
Syncope, n (%)	2 (1)	1 (1)	1 (1)	6 (8)	4 (11)	2 (5)	0.001
Other, n (%)	21 (7)	15 (8)	6 (7)	4 (5)	1 (3)	3 (8)	0.62
<i>Symptom feature</i>							
Typical nature [†] , n (%)	190 (69)	117 (64)	73 (81)	51 (66)	23 (61)	28 (72)	0.70
Typical location [‡] , n (%)	249 (91)	165 (90)	84 (93)	63 (82)	31 (82)	32 (82)	0.04
Radiation (any), n (%)	184 (67)	119 (65)	65 (72)	38 (49)	17 (45)	21 (54)	0.006
Associated symptoms, n (%)	150 (55)	94 (51)	56 (62)	44 (57)	21 (55)	23 (59)	0.81
<i>Symptom classification</i>							
Typical pain [§]	178 (65)	109 (59)	69 (77)	45 (58)	21 (55)	24 (62)	0.36
Atypical pain	96 (35)	75 (41)	21 (23)	32 (42)	17 (45)	15 (38)	

* Patient reporting more than one symptom were counted for all symptoms reported

[†] Typical nature is pain with descriptors of dull, heavy, tight, pressure, ache, squeezing, crushing or gripping

[‡] Typical location is chest, arm or jaw

[§] Typical pain classified in any patient who described pain of chest, arm or jaw, with descriptors of dull, heavy, tight, pressure, ache, squeezing, crushing or gripping.

^{||} Atypical pain classified in any patient who described epigastric or back pain, or pain that was burning, stabbing, indigestion like, or any other pain description, or presentation.

Table S4. Comparison of symptom features in all men and women with a diagnosis of type 1 myocardial infarction and those reclassified using a high-sensitivity cardiac troponin test and sex-specific diagnostic thresholds.

	Patient reported symptoms in those with type 1 myocardial infarction					
	Men			Women		
	All (n=184)	Reclassified by hs-cTnI assay [#] (n=9)	Identified by c-TnI assay (n=175)	All (n=90)	Reclassified by hs-cTnI assay [#] (n=27)	Identified by c-TnI assay (n=63)
<i>Presenting symptom*</i>						
Chest pain, n (%)	171 (93)	9 (100)	162 (93)	84 (93)	24 (89)	60 (95)
Dyspnoea, n (%)	58 (32)	5 (56)	53 (30)	35 (39)	8 (30)	27 (43)
Palpitation, n (%)	3 (2)	0 (0)	3 (2)	8 (9)	3 (11)	5 (8)
Syncope, n (%)	1 (1)	0 (0)	1 (1)	1 (1)	0 (0)	1 (2)
Other, n (%)	15 (8)	1 (11)	14 (8)	6 (7)	2 (7)	4 (6)
<i>Symptom feature</i>						
Typical nature [†] , n (%)	117 (64)	4 (44)	113 (65)	73 (81)	21 (78)	52 (83)
Typical location [‡] , n (%)	165 (90)	9 (100)	156 (89)	84 (93)	25 (93)	59 (94)
Radiation, n (%)	119 (65)	4 (44)	115 (66)	65 (72)	17 (63)	48 (76)
Additional symptoms, n (%)	94 (51)	4 (44)	90 (51)	56 (62)	17 (63)	39 (62)
<i>Symptom classification</i>						
Typical pain, [§] n (%)	109 (59)	4 (44)	105 (60)	69 (77)	20 (74)	49 (78)
Atypical pain, n (%)	75 (41)	5 (56)	70 (40)	21 (23)	7 (26)	14 (22)

* Patient reporting more than one symptom were counted for all symptoms reported

[†] Typical nature is pain with descriptors of dull, heavy, tight, pressure, ache, squeezing, crushing or gripping

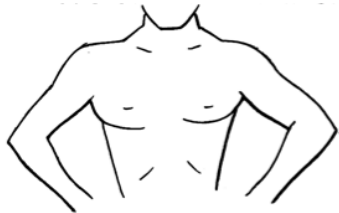
[‡] Typical location is chest, arm or jaw

[§] Typical pain classified in any patient who described pain of chest, arm or jaw, with descriptors of dull, heavy, tight, pressure, ache, squeezing, crushing or gripping.

^{||} Atypical pain classified in any patient who described epigastric or back pain, or pain that was burning, stabbing, indigestion like, or any other pain description, or presentation

[#] Participants diagnosed with myocardial injury identified by the high sensitivity assay with sex-specific thresholds (>16ng/L for women and >34ng/L for men) who would have been unrecognised with the previous generation of contemporary cardiac troponin I assays (those with high-sensitivity troponin I concentrations of 17-49ng/L for women and 35-49ng/L for men) were “reclassified”.

Figure S1. HighSTEACS suspected acute coronary syndrome symptom checklist.

Presenting symptom						
Chest pain	<input type="checkbox"/>	SOB	<input type="checkbox"/>	Palpitations	<input type="checkbox"/>	Collapse <input type="checkbox"/> Other_____ <input type="checkbox"/>
Quality, severity and duration of pain						
Nature of pain	<input type="checkbox"/>	Radiation	<input type="checkbox"/>	Associated symptoms	<input type="checkbox"/>	Severity and duration
Tight	<input type="checkbox"/>	Left arm	<input type="checkbox"/>	Nausea/Vomiting	<input type="checkbox"/>	pain score/10 _____
Dull	<input type="checkbox"/>	Right arm	<input type="checkbox"/>	Sweating	<input type="checkbox"/>	Duration of pain _____minutes
Squeezing	<input type="checkbox"/>	Back	<input type="checkbox"/>	Palpitations	<input type="checkbox"/>	No. of episodes in 24hr _____
Gripping	<input type="checkbox"/>	Jaw/neck	<input type="checkbox"/>	SOB	<input type="checkbox"/>	
Ache	<input type="checkbox"/>	Other_____	<input type="checkbox"/>	Collapse	<input type="checkbox"/>	
Crushing	<input type="checkbox"/>			Other_____	<input type="checkbox"/>	
Heavy	<input type="checkbox"/>					
Pressure	<input type="checkbox"/>					
Sharp	<input type="checkbox"/>					
Stabbing	<input type="checkbox"/>					
Hot	<input type="checkbox"/>					
Burning	<input type="checkbox"/>					
Indigestion	<input type="checkbox"/>					
Other_____	<input type="checkbox"/>					
Pain characteristics						
Worse on changing position for example sitting up or turning to the side						Yes/ No
Worse on palpation						Yes/ No
Worse on exertion (e.g. climbing stairs)						Yes/ No
Better with rest						Yes/ No
Better with nitrates						Yes/ No
Worse on changing position for example sitting up or turning to the side						Yes/ No
Is the pain intermittent/discrete/continuous?						
If previous myocardial infarction or known angina: similar / worse / different / na						
Location						
Central Chest	Yes/ No		Mark with an 'X' areas where pain is present 			
Left chest	Yes/ No					
Right chest	Yes/ No					
Arm	Yes/ No					
Jaw	Yes/ No					
Epigastric	Yes/ No					
Abdominal	Yes/ No					
Other_____	Yes/No					